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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,699	11/14/2001	Johan Samuel Van Den Brink	NL 000606	7458

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER

VARGAS, DIXOMARA

ART UNIT	PAPER NUMBER
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2859

DATE MAILED: 08/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/992,699

Applicant(s)

VAN DEN BRINK ET AL.

Examiner

Dixomara Vargas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment A filed 05/30/2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

2. Claims 1, 2 and 7-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Liu et al. (US 6,424,153).

With respect to claims 1, 8 and 9, Liu discloses a magnetic resonance imaging method comprising the steps of: generating magnetic resonance signals, applying temporary magnetic gradient fields (Column 2, lines 12-37), correcting the signal amplitudes of the magnetic resonance signals, or quantities calculated from the signal amplitudes (Column 5, lines 44-56), for deviations that are due to spatial non-linearities of the temporary magnetic gradient fields (Abstract; Column 1, lines 38-63; Column 5, lines 5-20); an applying an imaging pulse after said steps of generating magnetic resonance signals and applying magnetic gradient fields (Figure 2; Columns 1 and 2, lines 66-67 and 1-11 respectively).

3. With respect to claim 2, Liu discloses the correction of the signal amplitudes of the magnetic resonance signals is calculated from the spatial and temporary electrical current distribution through a gradient coil (Column 1, lines 38-63).

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4. With respect to claim 7, Liu discloses the sequence of temporary gradient fields provides flow sensitivity and a flow quantity is derived from the magnetic resonance signals, and the flow quantity is corrected for deviations that are due to spatial non-linearities of the temporary magnetic gradient fields (Abstract; Column 1, lines 38-63; Column 5, lines 5-20).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al. (US 6,424,153) in view of McKinnon (US 6,078,176).

With respect to claim 3, Liu discloses the claimed invention as stated above in paragraph 2 except for the step wherein diffusion-weighted magnetic resonance signals are generated. However, McKinnon discloses the generation of diffusion-weighted magnetic resonance signals

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(Abstract) Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use McKinnon's teachings of the diffusion-weighted magnetic resonance signals with Liu's magnetic resonance imaging method for the purpose of providing information depicting molecular displacements comparable to cell dimensions to obtain physiological information by a conventional imaging modality for example, for making diagnoses of diseases in the brain, infarcts, and for characterizing brain tumors.

8. With respect to claim 4, Liu discloses the sequence of temporary magnetic gradient fields includes a bipolar gradient pair (Figure 2).

9. With respect to claim 5, Liu discloses the sequence of temporary gradient fields includes a pair of gradient pulses that are separated by an RF refocusing pulse (Figure 2).

10. With respect to claim 6, Liu discloses the correction for deviations that are due to spatial non-linearities of the temporary magnetic gradient fields (Abstract; Column 1, lines 38-63; Column 5, lines 5-20).

Response to Arguments

11. Applicant's arguments filed 05/30/2003 have been fully considered but they are not persuasive.

12. Applicant argues that the prior art cited does not teach the temporary gradient fields which are used to correct the amplitude of the MR signals are applied before the imaging sequence. However, in contrast the prior art does the correction during the application of the sequence.

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13. The examiner disagrees since Liu discloses that the navigator echoes, for correcting the sequence, could be applied at any point in time including before the imaging sequence (Column 3, lines 56-61).

14. Also, if applicant intends that the correction is performed with a gradient field instead of a navigator echo, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., correction is performed with a gradient field) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

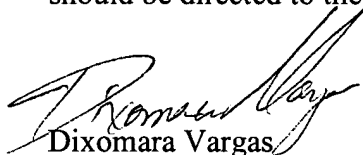
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dixomara Vargas whose telephone number is (703) 305-5705.

The examiner can normally be reached on 8:00 am. to 4:30 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (703) 308-3875. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3432 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-0956.


Dixomara Vargas
Art Unit 2859
July 31, 2003


Diego Gutierrez
Supervisory Patent Examiner
Technology Center 2800